

VI.5.3C-FCEXEC-TECH PROGRAM FCST FUNCTION FCEXEC HCL TECHNIQUES

This Section describes the Hydrologic Command Language (HCL) Techniques used by the Operational Forecast Program Function FCEXEC.

A detailed description of each Technique is in Section VI.5.3D [[Hyperlink](#)].

The Techniques used by Function FCEXEC can be categorized as those:

- o often used
- o not often used
- o not used for forecasting

<u>Technique</u>	<u>Notes</u>	<u>Description</u>
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Techniques Often Used

Techniques to specify the type of run (specify only one): 3/

CGROUP	<u>1/</u> <u>2/</u>	Specifies that run is a Carryover Group run and sets the name of the Carryover Group
FGROUP	<u>1/</u> <u>2/</u>	Specifies that run is a Forecast Group run and sets the name of Forecast Group
LISTFGS	<u>2/</u>	Specifies that run will be made for several Forecast Groups and sets the list of Forecast Groups to be run
ONESEG	<u>1/</u> <u>2/</u>	Specifies that run is a one Segment run and sets name of Segment to be run
LISTSEGS	<u>2/</u>	Specifies that run will be made for several Segments and sets the list of Segments to be run

Techniques to specify the run period:

STARTRUN	<u>1/</u> <u>2/</u>	Sets the time for start of run
ENDRUN	<u>1/</u> <u>2/</u>	Sets the time for end of run
LSTCMPDY	<u>1/</u> <u>2/</u>	Sets the time for end of computational (observed data) period
LSTALLOW	<u>1/</u> <u>2/</u>	Sets the future time limit for the Technique LSTCMPDY

Carryover save Techniques:

NUMCOSAV	<u>2/</u>	Sets dates for saving carryover
SAVETDY	<u>2/</u>	Sets whether or not to save carryover for TODAY

Display control Techniques:

<u>Technique</u>	<u>Notes</u>	<u>Description</u>
PLOTHYD	<u>1/</u> <u>2/</u>	Sets whether to display hydrograph plots
PRINTOUT	<u>1/</u> <u>2/</u>	Sets whether display any printer output
PRINTSMA	<u>1/</u> <u>2/</u>	Sets whether to display output from rainfall-runoff Operations
PRINTSNW	<u>1/</u> <u>2/</u>	Sets whether to display output from the snow Operations
PRTDAYS	<u>2/</u>	Controls the days to be displayed for the LIST-MSP Operation
PRTRCI	<u>2/</u>	Sets whether to display optional Rating Curve information on the PLOT-TUL Operation output
PRTRO	<u>2/</u>	Sets the display criteria for the LIST-MSP Operation
TABLES	<u>1/</u> <u>2/</u>	Sets whether to display tabular output

Process control Techniques:

FFG	<u>2/</u>	Sets whether to compute Flash Flood Guidance information
SACSNOW	<u>2/</u>	Sets whether or not the states of the SAC-SMA and SNOW-17 Operations should be output to files

Techniques Not Often Used

Techniques to control seasonal computations:

SNOW	<u>2/</u>	Sets whether to perform snow computations
FROST	<u>2/</u>	Sets whether to perform frozen ground computations
UPSC	<u>2/</u>	Sets whether to use observed areal extent of snow cover data to update the snow Operations
UPWE	<u>2/</u>	Sets whether to use observed snow water equivalent data to update the snow Operations

Techniques to control timing and data units for run time modifications:

MODTZC	<u>1/</u> <u>2/</u>	Sets the time zone to be used when a date is entered with an hour but no time zone code on MOD commands
MODUNITS	<u>1/</u> <u>2/</u>	Sets the units of data input to most MOD commands

<u>Technique</u>	<u>Notes</u>	<u>Description</u>
MODSACUN	<u>2/</u>	Sets the units of data input to the MOD commands that change parameters or carryover for soil moisture accounting Operations
MODAPIUN	<u>2/</u>	Sets the units of data input to the MOD commands that change parameters or carryover for the API Operations

Techniques to control the printing of warning messages:

MODWARN	<u>2/</u>	Sets whether to print warning messages from the MOD subroutines
RWWARN	<u>2/</u>	Sets whether to print warning messages from read/write subroutines

General control Techniques:

FUTPRECP	<u>2/</u>	Sets whether to set future precipitation to zero or read from PDB
METRIC	<u>1/</u> <u>2/</u>	Sets the English/Metric option for output
NOUTDS	<u>1/</u> <u>2/</u>	Sets if output should be in daylight or standard time
NOUTZ	<u>1/</u> <u>2/</u>	Sets the time zone number for output
PAGESIZE	<u>2/</u>	Sets the number of lines printed per page for LIST-MSP Operation

Techniques Not Used for Forecasting

Debug control Techniques:

FCDEBUG	<u>2/</u>	Sets the debug options for Forecast Component Operation routines
SYSDEBUG	<u>2/</u>	Sets the debug options for Forecast Component system routines

Notes:

- 1/ The Technique is used by other Functions and will apply to all Functions unless changed between COMPUTE commands.
- 2/ Techniques are either Universal or Nonuniversal depending on whether their values can be changed during the COMPUTE of a Function. Universal Techniques are assigned a single value for the COMPUTE of a Function. Nonuniversal Techniques can be changed within the COMPUTE of a Function.

The Universal Techniques are:

CGROUP
ENDRUN
FFG
FGROUP
FUTPRECP
LISTFGS
LISTSEGS
LSTALLOW
LSTCMPDY
METRIC
MODAPIUN
MODSACUN
MODTZC
MODUNITS
MODWARN
NOUTDS
NOUTZ
NUMCOSAV
ONESEG
PAGESIZE
PRTDAYS
RWWARN
SAVETDY
STARTRUN

The Nonuniversal Techniques are:

FCDEBUG
FROST
PLOTHYD
PRINTOUT
PRINTSMA
PRINTSNW
PRTRCI
PRTRO
SACSNOW
SNOW
SYSDEBUG
TABLES
UPSC
UPWE

- 3/ If more than one is specified then the ONESEG or LISTSEGS Technique will be used if it is specified or else the FGROUP or LISTFGS Technique will be used.